

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., Chairman

IOSEPH E. CONNARTON, Executive Director

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. McCARTHY | JENNIFER F. SULLIVAN

MEMORANDUM

TO: Norfolk County Retirement Board

FROM: Joseph E. Connarton, Executive Director

RE: Approval of Funding Schedule

DATE: October 5, 2018

This Commission is hereby furnishing you with approval of the revised funding schedule the Board recently adopted (copy enclosed). The schedule is effective in FY19 (since the amount under the prior schedule was maintained in FY19) and is acceptable under Chapter 32.

The System decreased the investment return assumption from 8.0% to 7.75%. Although this assumption is acceptable, we believe it is at the high end of a reasonable range of investment return assumptions as of January 1, 2018. We have generally recommended an assumption between 7.25% and 7.40% for our 2018 local system valuations, with the most common recommendation being 7.35%. For comparison, there are currently 36 systems using an assumption of 7.50% and an additional 36 systems using an assumption of less than 7.50%.

The System maintained the fully generational mortality assumption adopted in 2016. That assumption is based on an experience study performed by your actuary. The mortality assumption we use for other local systems is based on our analysis of State retirees and reflects longer life expectancy than the assumption you adopted. Your actuarial valuation also reflects the adoption of other demographic assumptions based on the experience study. We have not performed a recent experience analysis for local systems to compare our findings with the results of your actuary's study, although we plan to complete a study of retiree mortality for local systems by early next year. Your assumptions are less conservative than the current standard PERAC assumption set, which we continue to believe is reasonable. Based on our recent analysis of retiree mortality for the State Retirement System and results of our local system valuations, we could not justify the mortality assumption used in your valuation. We note that page 3 of the valuation report shows an inactive mortality loss of \$3.3 million reflecting fewer deaths than assumed.

If you have any questions, please contact PERAC's Actuary, Jim Lamenzo, at (617) 666-4446, extension 921.

JEC/irl

P:\actuaria\APPROP\Approp19\norfolk county approval.docx







C:\Users\Dan Sherman\OneDrive - Sherman Actuarial Services, LLC\Recovered Data\Norfolk\Val18\[Norfolk\18_Val 775pct 17k.xlsx]Approp. Results

Appropriation Forecast

| Fiscal | | Employer | Amortization | Employer | Employer . | | Unfunded |
|--------|---------------|---------------|---------------|---------------|--------------|-----------|---------------|
| Year | Employee | Normal Cost | Payments | Total Cost | Total Cost | Funded | Accrued |
| Ending | Contribution | with Interest | with Interest | with Interest | % of Payroll | Ratio %** | Laibility |
| 2019 | \$25,567,216 | \$9,863,991 | \$61,363,442 | \$71,227,433 | 24.6 | 62.4 | \$570,528,511 |
| 2020 | \$26,956,150 | \$10,055,777 | \$66,161,312 | \$76,217,089 | 25.2 | 64.4 | \$548,554,158 |
| 2021 | \$28,418,314 | \$10,244,850 | \$71,307,435 | \$81,552,285 | 25.8 | 67.2 | \$522,221,414 |
| 2022 | \$29,957,487 | \$10,430,577 | \$74,406,707 | \$84,837,284 | 25.7 | 70.0 | \$491,085,939 |
| 2023 | \$31,577,639 | \$10,612,273 | \$77,618,502 | \$88,230,775 | 25.6 | 73.1 | \$454,664,678 |
| 2024 | \$33,282,940 | \$10,789,200 | \$80,970,806 | \$91,760,006 | 25.5 | 76.3 | \$412,432,690 |
| 2025 | \$35,077,774 | \$10,960,561 | \$84,469,845 | \$95,430,406 | 25.3 | 79.7 | \$363,819,721 |
| 2026 | \$36,966,745 | \$11,125,495 | \$88,122,128 | \$99,247,623 | 25.2 | 83.3 | \$308,206,508 |
| 2027 | \$38,954,690 | \$11,283,079 | \$91,960,753 | \$103,243,832 | 25.1 | 87.1 | \$244,920,788 |
| 2028 | \$41,046,693 | \$11,432,316 | \$95,941,269 | \$107,373,585 | 25.0 | 91.2 | \$173,232,986 |
| 2029 | \$43,248,093 | \$11,572,137 | \$81,513,594 | \$93,085,731 | 20.7 | 95.4 | \$92,351,568 |
| 2030 | \$45,564,500 | \$11,701,390 | \$2,060,901 | \$13,762,291 | 2.9 | 99.8 | \$3,830,240 |
| 2031 | \$48,001,805 | \$11,818,843 | \$2,143,337 | \$13,962,180 | 2.8 | 99.9 | \$2,026,997 |
| 2032 | \$50,566,200 | \$11,923,172 | \$0 | \$11,923,172 | 2.3 | 100.0 | (\$0) |
| 2033 | \$53,264,187 | \$12,012,957 | \$0 | \$12,012,957 | 2.2 | 100.0 | (\$0) |
| 2034 | \$56,102,597 | \$12,086,678 | \$0 | \$12,086,678 | 2.2 | 100:0 | (\$0) |
| 2035 | \$59,088,603 | \$12,142,707 | . \$0 | \$12,142,707 | 2.1 | 100.0 | (\$0) |
| 2036 | \$62,229,742 | \$12,179,304 | \$0 | \$12,179,304 | 2.0 | 100.0 | (\$0) |
| 2037 | \$65,533,929 | \$12,194,606 | \$0 | \$12,194,606 | 1.9 | 100.0 | (\$0) |
| 2038 | \$69,009,477 | \$12,186,621 | \$0 | \$12,186,621 | 1.8 | 100.0 | (\$0) |
| 2039 | \$72,665,119 | \$12,153,224 | . \$0 | \$12,153,224 | 1.7 | 100.0 | (\$0) |
| 2040 | \$76,510,024 | \$12,092,144 | \$0 | \$12,092,144 | 1.7 | 100.0 | (\$0) |
| 2041 | \$79,952,976 | \$12,636,290 | \$0 | \$12,636,290 | 1.7 | 100.0 | (\$0) |
| 2042 | \$83,550,859 | \$13,204,923 | \$0 | \$13,204,923 | 1.7 | 100.0 | (\$0) |
| 2043 | \$87,310,648 | \$13,799,145 | \$0 | \$13,799,145 | 1.7 | 100.0 | (\$0) |
| 2044 | \$91,239,627 | \$14,420,106 | \$0 | \$14,420,106 | 1.7 | 100.0 | (\$0) |
| 2045 | \$95,345,410 | \$15,069,011 | \$0 | \$15,069,011 | 1.7 | 100.0 | (\$0) |
| 2046 | \$99,635,954 | \$15,747,117 | \$0 | \$15,747,117 | 1.7 | 100.0 | (\$0) |
| 2047 | \$104,119,572 | \$16,455,737 | \$0 | \$16,455,737 | 1.7 | 100.0 | (\$0) |
| 2048 | \$108,804,953 | \$17,196,245 | \$0 | \$17,196,245 | 1.7 | 100.0 | (\$0) |
| 2049 | \$113,701,175 | \$17,970,076 | \$0 | \$17,970,076 | 1.7 | 100.0 | (\$0) |
| 2050 | \$118,817,728 | \$18,778,729 | \$0 | \$18,778,729 | 1.7 | 100.0 | (\$0) |
| | | | | | | | |

^{**} Beginning of Fiscal Year